Agricultural Economy


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# Record 1997 Net Cash Income Braces Farms for Market Downturn

U.S. agriculture is producing voluminous output in 1998, despite severe drought in portions of the Plains and the South. Before the effects of the drought in Texas and Oklahoma set in, these States as well as Kansas set new wheat yield records, and current weather patterns have been favorable in most primary corn and soybean producing areas. Larger supplies and lower prices are expected for wheat, soybeans, and corn. Meanwhile, record-large commercial production of beef and pork has reduced livestock prices, with beef and hog prices in 1998 below last year and below the 1990-97 average (*AO* June-July 1998).

The expanding field crop and meat supplies coincide with export demand that is lackluster compared with recent years. Crop growing conditions have generally been favorable elsewhere in the world, and larger foreign supplies are reducing foreign import needs and heightening competition in export markets. In addition, the Asian economic crisis is interrupting growth in global agricultural demand, and a strengthening dollar is raising the cost of U.S. goods to foreign buyers.

With supplies building, U.S. farm prices and income will drop sharply following generally strong farm financial performance in 1996 and 1997. U.S. net cash income in 1998 will fall nearly $7.4 billion below last year's record $60.8 billion, returning to the levels of the early 1990's. (The 1998 forecast excludes the effect of farm program payments made to farmers in advance under recent legislation.)

An analysis of short-term farm business performance by USDA's Economic Research Service (ERS), based on the 1997 Agricultural Resource Management Study (ARMS), provides the first comprehensive view of farm financial strength as the U.S. agricultural sector enters this market downturn. Results show that most farm businesses are financially sound and will likely withstand the current downturn into 1999. In addition, farm credit availability is relatively strong, as are financial conditions of most farm lenders. Nevertheless, many farmers are financially stressed, particularly in the Plains and the South where they face repeated crop losses or the combination of low output *and* reduced prices.

Today's market events, while causing financial stress in some parts of the U.S., are not altering the fundamental comparative advantage of U.S. agriculture. Growth in global income and population and advancing agricultural trade liberalization are the underlying drivers of U.S. farm export opportunities, and in turn of U.S. farm income. These trends are expected to remain positive over the long term.

### *Farm Financial Health Status*

Most farm business operations (those with at least $50,000 in gross farm sales) entered 1998 in good financial shape. Even though prices for many commodities retreated from 1996's unusually high levels, a turnaround in the cattle industry and near-record crop harvests brought profits to many of the Nation's farms and ranches in 1997.

*Nationally, two out of every three farm businesses (65.5 percent) were considered to be in a favorable financial position (positive net farm income, and debt/asset ratio less than 40 percent) as of January 1, 1998.* This represents a modest decline from a year earlier when 67.9 percent of farms qualified, but remains one of highest percentages of the 1990's. These profitable, low-leveraged operations entered 1998 with sufficient funds to take advantage of investment and expansion opportunities. The share of vulnerable farms (negative net farm income, and debt/asset ratio more than 40 percent) was slightly higher entering 1998 than the previous year—5.6 percent compared with 4.1 percent—but still below the 7.8 percent registered in 1995.

Some areas of the country—most notably the *Appalachian, Southeast,* and *Delta* regions— rebounded strongly from a weak performance in 1996, demonstrating increases in the share of financially favorable farm businesses.

Not all farmers registered a good year in 1997, particularly in the Northern Plains where a combination of poor growing conditions (spring flooding) and diminished yields (largely resulting from scab) left many producers with substantial losses and considerable financial uncertainty as they faced 1998.

Overall financial performance dropped in the *Lake States, Northern Plains, Corn Belt* and *Pacific* regions. Each of these regions exhibited a significant decline in the percentage of farm businesses classified in a favorable financial position and an increase in the share considered vulnerable.

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The Corn Belt, despite a decline in overall financial performance, remained one of the regions with the highest percentage of financially favorable farm businesses.

Generally, farm businesses that specialized in the production of wheat and corn retreated from 1996's financial success, while beef cattle farms and ranches improved in overall financial performance in 1997.

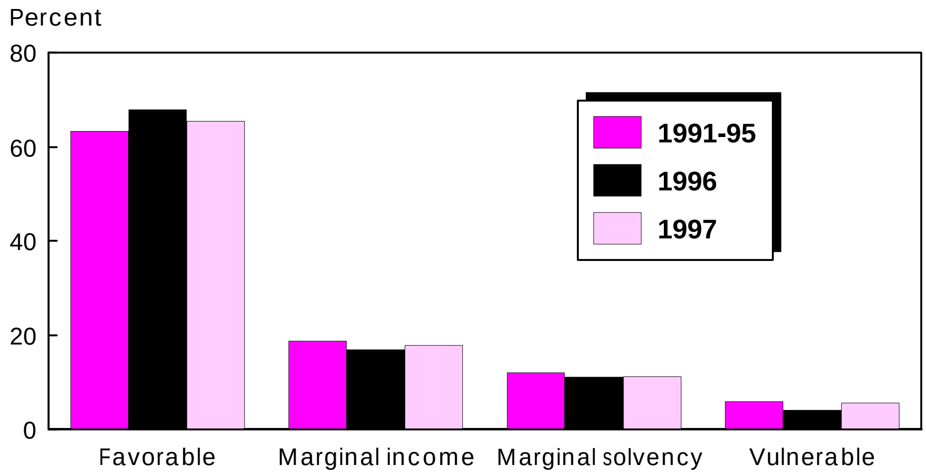
*Farm business before-tax earnings were relatively consistent with the widespread profitability enjoyed in 1996.* Net farm income, a comprehensive measure of farm business profits, averaged $58,943 in 1997—an increase from 1996's $55,384 and one of the highest levels reached during the 1990's. Larger gross incomes from higher livestock sales, steady government payments, and increased earnings from farm-related sources such as custom feeding generated an average income increase that offset average rises in production expenses.

Not all farm types nor all regions of the country reported relatively stable to increasing net farm income levels for 1997. Farms producing primarily corn, soybeans, cotton, a mix of cash grains, and hogs reported 1997 incomes that were lower than in 1996. For corn and cotton farms, however, 1997 incomes remained on par with those reported *before* 1996. For soybean and hog farms, 1997's net income, on average, remained above earlier years.

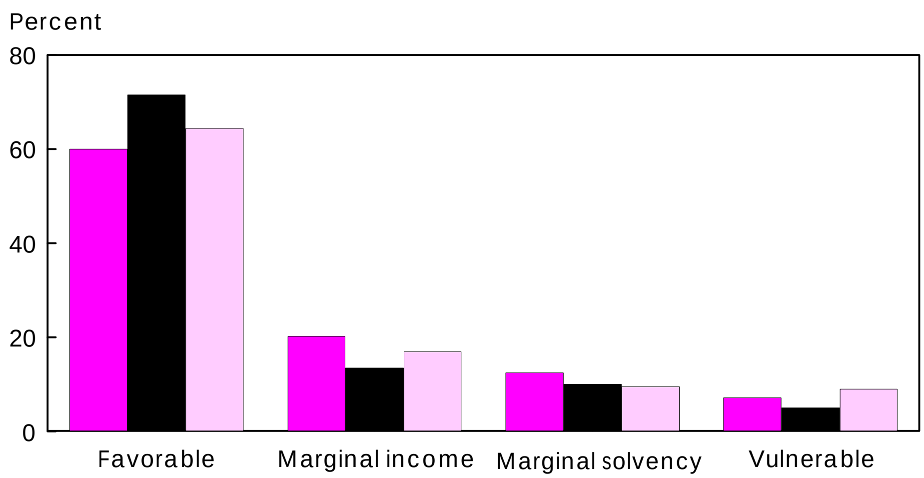
On average, reductions in farm business incomes were confined to three regions: the *Northern Plains*, *Mountain*, and *Corn Belt*. The share of farm businesses with negative net farm income notably increased in the Lake States, Corn Belt, and Northern Plains regions. The highest percentages of farms losing money in 1997 were in the Southern Plains (27 percent) and Mountain (28 percent) regions.

Even though farm households took in less from farming in 1997, *off-farm income kept average household income at 1991-95 levels*. (This includes all farm households, including those with less than $50,000 in gross farm sales.) The same is

**Most U.S. Farm Businesses Ended 1997 in Good Financial Shape . . .**




**. . . but Financial Positions Declined in the Northern Plains**




Northern Plains is North Dakota, South Dakota, Nebraska, and Kansas.
*Favorable*: positive income, with a debt/asset ratio less than 40 percent. *Marginal income*: negative income, with a debt/asset ratio of 40 percent or less. *Marginal solvency*: postive income, with a debt/asset ratio above 40 percent. *Vulnerable*: negative income, with a debt/asset ratio above 40 percent.

Source: Agricultural Resource Management Study.
Economic Research Service, USDA

expected in 1998. Since 1991, average operator household income has been relatively stable, mirroring the average for all U.S. households.

Changes in farm-related income are more critical to some households than others. To generate a cash income close to that of all U.S. households, farms need to generate sales in the upper end of the small farm category ($100,000-$249,999).

Operators in this category overwhelmingly name farming as their major occupation. Although small farm operators who named farming as their major occupation generated almost twice as much farm income as other small farms, their household income in 1997 was about the same as the average U.S. household. Farmers currently undergoing the most financial stress are those with little off-farm income (see page 8).

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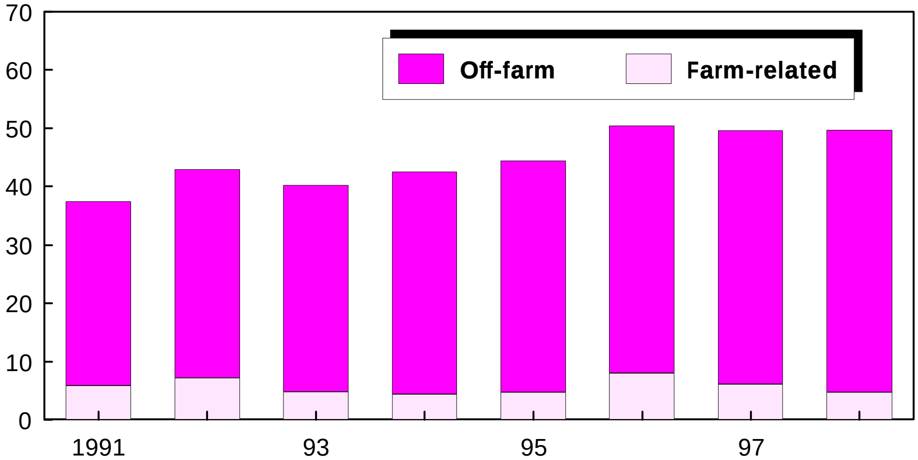
**Rising Off-farm Income Helps Maintain Average Farm Household Income**

$1,000 per household




1998 forecast. Data are for all farm households, not just farm businesses (at least $50,000 in gross farm sales).

Economic Research Service, USDA

## *Balance Sheets Remain Strong*

*Average net worth of farm businesses increased for the fourth consecutive year in 1997.* Increasing farm real estate values and modest increases in debt not only spurred increases in net worth, but also helped to hold the average debt/asset ratio at 1996's value of 17 percent. Since the late 1980's, most farm businesses have been reluctant to take on burdensome debt loads. That trend continued in 1997, with farm businesses strengthening their balance sheets. More than 80 percent ended the year with a debt/asset ratio below 40 percent, indicating only a small risk of insolvency or of cash-flow problems from debt commitment.

Only about 4 percent of farm businesses faced risk of insolvency, defined as having a debt/asset ratio above 70 percent. The number of highly leveraged farms was consistent with levels observed during the previous 5 years and remains well below the mid-1980's, when more than 10 percent of farms risked insolvency.

The *Lake States* region was one of the few where the average debt/asset ratio increased in 1997. Its 24-percent average debt/asset ratio was the highest among production regions. A reduction in average debt helped the *Southeast, Delta,* and *Mountain* regions reduce average debt/asset ratios in 1997. At the end of 1997, however, the *Delta, Lake States,* and *Southern Plains* regions had the highest concentration of highly leveraged farms—at least one out of five farm businesses had a debt/asset ratio above 40 percent.

*Lower income in 1998 could weaken the ability of farm businesses to meet debt repayment obligations.* Debt repayment capacity utilization (DRCU) is computed as the ratio of actual debt to maximum feasible debt and measures the extent of a farm business's or operator's use of potential credit repayment ability (i.e., a rise indicates that farmers tap a greater share of credit estimated to be available to them). In 1997, farm business DRCU averaged below 40 percent for the second consecutive year. At 36 percent, the DRCU was slightly lower than a year earlier and comparable with 1992, the lowest of the 1990's. However, the percentage of farms that borrowed well beyond their ability to repay from current income increased to 20 percent.

In 1997, farm businesses in the *Mountain* and *Southern Plains* regions had improved debt repayment ability based on higher current incomes and modest changes in debt use. However, lower income and increased debt pushed debt repayment capacity utilization to dangerously high levels (DRCU above 70 percent) in the *Lake States* and *Northern Plains* regions.

This broad measure of farm business performance is sensitive to short-term changes in net income that are occurring in 1998. For example, a 20-percent reduction in net income applied to the 1997 base data would increase the DRCU to 60 percent, and the share of farm businesses with severe repayment problems would climb to 35 percent.

Regional and commodity changes in debt repayment ability reflect divergent financial strategies taken by farmers in recent years. Some farm businesses took advantage of the favorable financial conditions in 1996 to pay off or pay down existing debt. Others used available funds and debt capital to expand and invest in new machinery and equipment. Businesses that borrowed with the expectation of continued strong prices may experience debt repayment problems in 1998.

The makeup of vulnerable operations (high debt and negative income) varies by economic size and economic conditions during the year, but is concentrated among the larger small farms (those with gross sales of $100,000 to $249,999). More than 40 percent of all vulnerable operations were in this size group. Within this group, 6 percent were vulnerable in 1997, up from 4 percent the year before. This group includes a greater proportion of cash grain farms.

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Internet users will find more information (including a large number of charts and tables) on the financial performance of U.S. farm businesses at www.econ. ag.gov/briefing/fbe/sf/results97/brief97.html

## *Farm Credit Conditions Favorable at Mid-1998*

Overall, farm credit availability remained strong in the first half of 1998. Most U.S. farmers continue to enjoy competitive credit markets and lower interest rates. However, if the prices of major commodities remain weak, lenders will be more cautious when lending to farmers in the coming months, particularly in regions most dependent on commodities experiencing lower prices and poor production.

As 1998 progresses, credit conditions in sections of the *Plains* and *Southern States* affected by poor production and lower prices can be expected to deteriorate more rapidly. Indicators of farm financial stress, such as farm loan delinquency rates, typically do not become evident until after serious problems arise (that is, they are lagging indicators of financial stress). Surveys of bankers indicate an uptick in farm loan repayment problems. A survey of Farm Credit System (FCS) lenders in February revealed that some FCS associations, particularly in the Northern Plains, expected higher levels of financial stress this year compared with last year.

Demand for Farm Service Agency (FSA) lending is also an indicator of farm financial health. Although loan demand was up in sections of the Northern Plains, total FSA loan volume obligations for the current fiscal year should be similar to last year. An increase in demand for FSA programs from 1998 events will occur in fiscal 1999 as farmers first exhaust their commercial credit sources.

Farmers have invested heavily in capital assets, such as new machinery, since 1994, adding over $20 billion in total outstanding farm debt. Some farmers will undoubtedly have difficulty servicing this additional debt if farm incomes weaken over an extended period. However, farm income is only a portion of total farm household income and other (off-farm) income sources remain strong. Also, most farmers' strong balance sheets will allow them to weather a temporary economic downturn.

Recent increases in farm debt have been supported by strong farmland markets. Farmland remains the sector's primary asset and farmers' primary source of collateral. Strong farm incomes, coupled with government payments, a falling cost of capital, and in some regions strong urban demand for farmland, have increased farmland values. There are early indications that the rapid ascent in farmland values may be stalling. If farmland values fall, lenders will become much more circumspect when lending to farmers.

The financial condition of farm lenders remains strong at this time. Commercial banks with significant agricultural loan portfolios and most FCS associations are well capitalized and have reported strong profits in recent years. Therefore, lenders should be able to weather a shortrun deterioration in farm credit quality.
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**U.S. Farm Income To Drop in 1998**

| | Average 1990-97 | 1994 | 1995 | 1996 | 1997 | 1998 | Change 1997-98 |
|---|---|---|---|---|---|---|---|
| | | | | *$ billion* | | | |
| Crop receipts | 94.9 | 100.3 | 95.8 | 115.6 | 112.5 | 105.7 | -6.8 |
| Food grains | 9.1 | 9.5 | 10.4 | 10.7 | 10.6 | 9.1 | -1.5 |
| Feed crops | 22.3 | 20.4 | 24.6 | 27.3 | 27.6 | 24.4 | -3.2 |
| Cotton | 6.0 | 6.7 | 6.9 | 7.0 | 6.5 | 6.0 | -0.6 |
| Oil crops | 14.7 | 14.7 | 15.5 | 16.4 | 19.9 | 17.9 | -2.0 |
| Livestock receipts | 90.2 | 89.7 | 87.6 | 92.2 | 96.2 | 94.3 | -1.9 |
| Meat animals | 48.2 | 46.8 | 44.8 | 44.4 | 49.9 | 46.9 | -3.0 |
| Dairy products | 20.1 | 19.9 | 19.9 | 22.8 | 21.0 | 22.4 | 1.4 |
| Poultry and eggs | 18.2 | 18.4 | 19.1 | 22.3 | 22.2 | 22.1 | -0.1 |
| Services and forestry | 17.8 | 17.9 | 19.4 | 20.7 | 22.1 | 22.5 | 0.4 |
| Total value of production | 203.0 | 207.9 | 202.8 | 228.4 | 230.4 | 222.6 | -7.9 |
| Direct government payments | 8.8 | 7.9 | 7.3 | 7.3 | 7.5 | 7.4 | -0.1 |
| Net farm income | 45.3 | 48.3 | 36.0 | 53.5 | 49.8 | 42.5 | -7.3 |
| Net cash income | 54.6 | 50.7 | 51.8 | 56.4 | 60.8 | 53.4 | -7.4 |

1997 preliminary; 1998 forecast does not include farm program payments made in advance under recent legislation.

Economic Research Service, USDA

## *Behind the Long-Term Growth In Ag Exports & Farm Incomes*

Cyclical production is a major factor contributing to the current commodity market situation. Large global supplies of a number of agricultural commodities are pressuring prices. For wheat, part of this buildup of supplies results from an increase in global production over the last 2 years in response to high prices in 1996 and 1997. As wheat prices have fallen recently, global production can be expected to decline in 1999 in response.

The situation is also characterized by lower exports. The value of U.S. agricultural exports during the first 9 months (October-June) of the 1998 fiscal trade year was down 4 percent from the same period last year; exports to Asia were down 16 percent. These declines reflect in part the Asian economic crisis. Asia, including Japan, typically accounts for almost half of U.S. agricultural exports. U.S. farm exports to other regions, however, were up nearly 7 percent. In particular, agricultural exports to Canada were up 9 percent compared with October-June trade levels of last year, and were up 18 percent to Mexico. Outside Asia, economic growth mostly remains strong.

The Asian economic crisis is only one factor in the decline in U.S. agricultural exports this year. The U.S. is facing strong competition from record or near-record crops in South America, following 2 years of high field crop prices globally. In addition, lower U.S. exports to Asia reflect factors other than weakened demand from the economic crisis. For example, China, a significant importer of corn in 1994/95, was a net exporter in 1997/98 (and will be in 1998/99), contributing to the reduction in U.S. exports.

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In the longer term, growth in global income and population and advancing agricultural trade liberalization are the underlying drivers of U.S. farm export opportunities, and in turn, U.S. farm prices and income. Greater market orientation in the domestic agriculture sector under the 1996 Farm Act puts U.S. farmers in a favorable position to benefit from their comparative advantage in agriculture and compete in the global marketplace.

Growth in global agricultural demand, U.S. agricultural trade, prices, and farm incomes remains the most likely prospect for U.S. agriculture. However, several uncertainties could limit such growth over the next several years. This weaker scenario would stem not so much from the current situation, but from a number of medium-term factors.

The *Asian economic crisis* is a key factor leading to slower global demand prospects. The timepath of Asian economic recovery is uncertain and there is some possibility of economic growth below long-term rates for an extended period of time. A prolonged Asian adjustment period would weaken demand for U.S. agricultural exports for a number of years.

An ERS reassessment of *China's* agricultural sector data suggests the possibility of weaker future import demand for basic commodities in China. Preliminary work indicates that China underestimated agricultural acreage and overestimated livestock numbers and production. With more acres and less livestock, China would require less foodstuffs and livestock feed than forecasters have expected.

The *European Union (EU)* will be looking at options to implement a new agricultural policy— *Agenda 2000.* Lower levels of price support (closer to world prices) and eliminating the acreage set-aside could be key elements of the new policy. Preliminary research findings indicate that the EU could make sizable *unsubsidized* exports of commodities at lower price-support levels. This could create greater global competition in agricultural trade, particularly for wheat.

*WTO negotiations in 1999* are becoming increasingly important. Because one of the keys to strong U.S. agriculture is growth in trade, further liberalizing of global markets will allow U.S. farmers to better realize gains from their comparative advantage in an environment of freer competition. Use of P.L. 480 (Food for Peace Program) and the Food Security Commodity Reserve, and more targeted use of GSM credits and other export programs can strengthen exports in the short term. However, the pace and scope of policy reforms resulting from the 1999 WTO negotiations to further liberalize trade will be more important for the long-term health of U.S. agriculture.

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